AUTHOR INDEX

Ahmadjian, Mark, Cryogenic Infrared radiance Instrument for Shuttle (CIRRIS) telescope, 225
Allen, R. G., Performance of the spectropolarimeter for the Space Telescope faint object spectrograph, 259
Angel, J. R. P., Charge-coupled device (CCD)/transit instrument (CTI) deep photometric and polarimetric survey—a progress report, 137
———, Faint object spectrograph (FOS) calibration, 268
———, Multiple object fiber optic spectroscopy, 279
———, Performance of the spectropolarimeter for the Space Telescope faint object spectrograph, 259
Apt, Jerome, Near-infrared linear array spectrometer for space applications, 177
Aptaker, Irving M., Near-infrared mapping spectrometer for investigation of Jupiter and its satellites, 182
Bailey, Gary C., Hybrid packaging approach to improved low-noise operation of photovoltaic InSb detectors, 29
———, Near-infrared linear array spectrometer for space applications, 177
Bartko, Frank, Cryogenic testing of stepper motors, 35
———, Faint object spectrograph (FOS) calibration, 268
Beaver, E. A., Faint object spectrograph (FOS) calibration, 268
Blum, A., Cost effective development of a shuttle-based astronomical instrument control system, 506
Bohlin, R., Faint object spectrograph (FOS) calibration, 268
Bottema, Murk, Refractive field correctors for the Starlab ultraviolet telescope, 498
Bowers, C., Photon counting photodiode array detector for far ultraviolet (FUV) astronomy, 44
Bozyan, E. P., Photometric properties of the Texas MkII electrographic camera, 453
Brasunas, J. C., Use of a Fourier transform spectrometer on a balloon-borne telescope and at the Multiple Mirror Telescope (MMT), 208
Breckinridge, James, Near-infrared linear array spectrometer for space applications, 177
———, Space Telescope low scattered light camera—a model, 395
Britt, J. P., InSb charge-injection device array performance, 18
Budney, T. J., Cost effective development of a shuttle-based astronomical instrument control system, 506
Buhl, D., Tunable diode laser heterodyne spectrometer for remote observations near 8 μm, 197
Burbidge, E. M., Faint object spectrograph (FOS) calibration, 268
Butcher, Harvey, Multi-aperture spectroscopy at Kitt Peak, 296
———, Speckle spectroscopy: an application for the multi-anode microchannel array detector system, 311
Capps, R. W., Applications of an infrared charge-coupled device Schottky diode array in astronomical instrumentation, 156
Carleton, N. P., Use of a Fourier transform spectrometer on a balloon-borne telescope and at the Multiple Mirror Telescope (MMT), 208
Carruthers, George R., Microchannel intensified electrography, 415
Cash, Webster, Grazing incidence optics: new techniques for high sensitivity spectroscopy in the space ultraviolet, 321
Chambers, R. J., Stellar spectrograph using aberration corrected concave holographic grating, 254
Chance, K. V., Use of a Fourier transform spectrometer on a balloon-borne telescope and at the Multiple Mirror Telescope (MMT), 208
Chelli, A., Two-dimensional infrared speckle interferometry with a 32 × 32 InSb charge-injection device (CID) array, 26
Clary, Maurice C., Charge-coupled (CCD) television camera for NASA's Galileo mission to Jupiter, 376
Cochran, William D., Ultra-high precision radial velocity spectrometer, 315
Cochrane, A., Miniature imaging photon detector, 365
Cohen, Judith G., Multiple object fiber optics spectrograph feed for the Hale telescope, 289
Colucci, A. J., Galileo Institute for Astronomy (IFA) charge-coupled device (CCD) system, 96
Davidsen, A. F., Faint object spectrograph (FOS) calibration, 268
Dereniak, E. L., Applications of an infrared charge-coupled device Schottky diode array in astronomical instrumentation, 156
Drake, Raleigh M., Modified Bowen-Walraven image slicer, 427
Eisenhardt, Peter R. M., Design of a four-channel simultaneous visual infrared photometer, 434
Ekstrom, Philip A., Single photon counters for the infrared, 2
Enard, Daniel, European Southern Observatory (ESO) coudé echelle spectrometer, 232
Epps, H., Charge-coupled device (CCD)/transit instrument (CTI) deep photometric and polarimetric survey—a progress report, 137
Evans, D. C., Optical design of the Diffuse Infrared Background Experiment for NASA's Cosmic Background Explorer, 483
Everett, Paul, Texas Instruments' virtual phase charge-coupled device (CCD) imager operated in the frontside electron-bombarded mode, 151
Ewing, W. S., Applications of an infrared charge-coupled device Schottky diode array in astronomical instrumentation, 156
Ford, H., Faint object spectrograph (FOS) calibration, 268
Fowler, A. M., InSb charge-injection device array performance, 18
Fredrick, Laurence W., Methods of photoelectric astrometry, 448
Glenar, D. A., Tunable diode laser heterodyne spectrometer for remote observations near 8 μm, 197
Goad, L. E., Application of a charge-coupled device (CCD) for coudé spectroscopy, 130
Goebel, John H., Integrated infrared detector arrays for low-background applications, 9
Gorham, R., Starlab detector system: a wide field, high resolution, photon counting array, 490
Goss, Willis C., Multiple object fiber optics spectrograph feed for the Hale telescope, 289
Greenaway, A. H., Miniature imaging photon detector, 365
Griboval, P. J., Photometric properties of the Texas MkII electrographic camera, 453
Haas, Allan K., Fluorescent plastic coatings for improving ultraviolet and blue response of cooled silicon charge-injection devices (CIDs), 52
Harms, R. J., Faint object spectrograph (FOS) calibration, 268
Hartig, G. F., Photon counting photodiode array detector for far ultraviolet (FUV) astronomy, 44
Heckathorn, Harry M., Microchannel intensified electrography, 415
Henry, J. P., Galileo Institute for Astronomy (IFA) charge-coupled device (CCD) system, 96
Hepburn, Lynn V., Modified Bowen-Walraven image slicer, 427
Hermann, J. A., Hybrid packaging approach to improved low-noise operation of photovoltaic InSb detectors, 29
Hill, J. M., Multiple object fiber optic spectroscopy, 279
Hintzen, P., Multiple object fiber optic spectroscopy, 279
Hlivak, R. J., Galileo Institute for Astronomy (IFA) charge-coupled device (CCD) system, 96
Holm, A. V., Performance of the International Ultraviolet Explorer for spectral imaging, 334
Hopkinson, Gordon R., Optimization of charge-coupled device (CCD) imager performance for astronomy, 82
Houck, James R., Cryogenic testing of stepper motors, 35
Howell, R. R., Galileo Institute for Astronomy (IFA) charge-coupled device (CCD) system, 96
Hynecek, Jaroslav, Texas Instruments' virtual phase charge-coupled device (CCD) imager operated in the frontside electron-bombarded mode, 151
Janesick, James R., Charge-coupled device (CCD) television camera for NASA's Galileo mission to Jupiter, 376
Jarvis, John F., Analysis of synthesized dim galaxy images, 473
Jennings, D. E., Tunable diode laser heterodyne spectrometer for remote observations near 8 μm, 197
Jorden, A. R., Photon counting Reticon system—description and performance, 368
Jorden, Paul R., Royal Greenwich Observatory (RGO) charge-coupled device (CCD) camera, 87
Joseph, Charles L., High resolution spectroscopy with the multi-anode microchannel array detector systems, 301
———, Speckle spectroscopy: an application for the multi-anode microchannel array detector system, 311

Kalata, Kenneth, Highly versatile computer-controlled television detector system, 69
Klaasen, Kenneth P., Charge-coupled device (CCD) television camera for NASA's Galileo mission to Jupiter, 376
Klim, K., Coudé auxiliary telescope (CAT): a low cost telescope at the European Southern Observatory, 243
Kostiuk, T., Tunable diode laser heterodyne spectrometer for remote observations near 8 μm, 197
Kuper, T. G., Space Telescope low scattered light camera—a model, 395
Lacy, J. H., Cooled grating array spectrometer for 0.6–5 μm, 173
———, Cooled grating Fabry-Perot spectrometer for the 10 μm region, 219
Léna, P., Two-dimensional infrared speckle interferometry with a 32 × 32 charge-injection device (CID) array, 26
Lerner, J. M., Stellar spectrograph using aberration corrected concave holographic grating, 254
Lindley, D., Multiple object fiber optic spectroscopy, 279
Livingston, W. C., Low noise spectrometer for the daily measurement of solar chromospheric flux, 249
Lockhart, Robert F., Wide field and planetary camera for Space Telescope, 388
Lowrance, John, Texas Instruments' virtual phase charge-coupled device (CCD) imager operated in the frontside electron bombarded mode, 151
Ludwig, U. W., Optical design of the Diffuse Infrared Background Experiment for NASA's Cosmic Background Explorer, 483
Lumb, David H., Optimization charge-coupled device (CCD) image performance for astronomy, 82
Lyons, A., Miniature imaging photon detector, 365
Mackay, Craig D., Drift scan observations with a charge-coupled device (CCD), 146
Mahaffey, Charles, Low noise spectrometer for the daily measurement of solar chromospheric flux, 249
Marcus, S. L., Development of a dual microchannel plate intensified charge-coupled device (CCD) speckle camera, 113
Margon, B., Faint object spectrograph (FOS) calibration, 268
McAlister, H. A., Development of a dual microchannel plate intensified charge-coupled device (CCD) speckle camera, 113
McClintock, William E., Grazing incidence optics: new techniques for high sensitivity spectroscopy in the space ultraviolet, 321
McCoy, J., Faint object spectrograph (FOS) calibration, 268
McCreight, Craig R., Integrated infrared detector arrays for low-background applications, 9
McGraw, J. T., Charge-coupled device (CCD)/transit instrument (CTI) deep photometric and polarimetric survey—a progress report, 137
McMillan, R. S., Software simulations of the detection of rapidly moving asteroids by a charge-coupled device, 104
McWhirter, I., Miniature imaging photon detector, 365
Mertz, L., New two-dimensional photon camera, 360
Miller, M. S., Optical design of the Diffuse Infrared Background Experiment for NASA's Cosmic Background Explorer, 483
Moos, H. W., Photon counting photodiode array detector for far ultraviolet (FUV) astronomy, 44
Moseley, H., Optical design of the Diffuse Infrared Background Experiment for NASA's Cosmic Background Explorer, 483
Mumma, M. J., Tunable diode laser heterodyne spectrometer for remote observations near 8 μm, 197
Nordholt, J. E., Cooled grating array spectrometer for 0.6–5 μm, 173
Opal, C. B., Photometric properties of the Texas MkII electrographic camera, 453
Panek, R. J., Performance of the International Ultraviolet Explorer for spectral imaging, 334
Papaliolios, C., New two-dimensional photon camera, 360
Parise, Ronald A., Cost effective development of a Shuttle-based astronomical instrument control system, 506
Pembroke, R., Photon counting photodiode array detector for far ultraviolet (FUV) astronomy, 44
Pilcher, C. B., Galileo Institute for Astronomy (IFA) charge-coupled device (CCD) system, 96
Pompea, Stephen M., Cryogenic testing of stepper motors, 35
Read, P. D., Photon counting Reticon system—description and performance, 368
Rees, D., Miniature imaging photon detector, 365
Richardson, E. H., Grens for the Ritchey-Chrétien (R-C) telescope, 252
Ripp, L., Faint object spectrograph (FOS) calibration, 268
Robinson, W. G., Development of a dual microchannel plate intensified charge-coupled (CCD) speckle camera, 113
Rodgers, A., Starlab detector system: a wide field, high resolution, photon counting array, 490
Schaff, F. L., Earth resources techniques applied to planetary exploration, 478
Schiffer, F. H. III, Performance of the International Ultraviolet Explorer for spectral imaging, 334
Schulte in den Bäumen, J., Proposal for advanced infrared spectrophotometers, 166
Scott, J. S., Multiple object fiber optic spectroscopy, 279
Shack, R. V., Space Telescope low scattered light camera—a model, 395
Shepherd, F. D., Applications of an infrared charge-coupled device Schottky diode array in astronomical instrumentation, 156
Sibille, F., Two-dimensional infrared speckle interferometry with a 32 × 32 InSb charge-injection device (CID) array, 26
Simmons, J. E., Modified Bowen-Walraven image slicer, 427
Smartt, Raymond N., Solar corona photoelectric photometer using mica etalons, 442
Smith, Charles D., Methods of photoelectric astrometry, 448
Smith, Donald R., Cryogenic Infrared Radiance Instrument for Shuttle (CIRRIS) telescope, 225
Smith, D. S., Hybrid packaging approach to improved low-noise operation of photovoltaic InSb detectors, 29
Smith, Harlan J., Ultra-high precision radial velocity spectrometer, 315
Smith, William Hayden, Ultra-high precision radial velocity spectrometer, 315
Spiro, I. J., Astronomy units and nomenclature for engineers and physicists, 516
Stapinski, T., Starlab detector system: a wide field, high resolution, photon counting array, 490
Stefanovitch, D., Two-dimensional infrared speckle interferometry with a 32 × 32 InSb charge-injection device (CID) array, 26
Stockman, H. S., Charge-coupled device (CCD)/transit instrument (CTI) deep photometric and polarimetric survey—a progress report, 137
Stockman, H. S., Differential imaging using charge-coupled device (CCD) imagers with on-chip charge storage, 76
Stoll, C. P., Software simulations of the detection of rapidly moving asteroids by a charge-coupled device, 104
Stone, R. W., Cost effective development of a Shuttle-based astronomical instrument control system, 506
Stuart, Frank E., Fluorescent plastic coatings for improving ultraviolet and blue response of cooled silicon charge-injection devices (CIDs), 52
Tarenghi, Massimo, European Southern Observatory (ESO) automatic prime focus camera and the general problem of remote control, 404
Thorne, D. J., Royal Greenwich Observatory (RGO) charge-coupled device (CCD) camera, 87
Timothy, J. Gethyn, High resolution spectroscopy with the multi-anode microchannel array detector systems, 301
———, Speckle spectroscopy: an application for the multi-anode microchannel array detector system, 311
Titus, J. S., Cryogenic Infrared Radiance Instrument for Shuttle (CIRRIS) telescope, 225
Traub, W. A., Use of a Fourier transform spectrometer on a balloon-borne telescope and at the Multiple Mirror Telescope (MMT), 208
Tubbs, Eldred F., Multiple object fiber optics spectrograph feed for the Hale telescope, 289
Tyson, J. Anthony, Analysis of synthesized dim galaxy images, 473
Valdes, Francisco, Analysis of synthesized dim galaxy images, 473
———, Resolution classifier, 465
van Breda, I. G., Photon counting Reticon system—description and performance, 368

———, Royal Greenwich Observatory (RGO) charge-coupled device (CCD) camera, 87
Vrtilek, J. M., Use of a Fourier transform spectrometer on a balloon-borne telescope and at the Multiple Mirror telescope (MMT), 208
Wang, D., Cryogenic Infrared Radiance Instrument for Shuttle (CIRRIS) telescope, 225
Williams, J. T., Charge-coupled device (CCD)/transit instrument (CTI) deep photometric and polarimetric survey—a progress report, 137
Wimmers, J. T., Hybrid packaging approach to improved low-noise operation of photovoltaic InSb detectors, 29
Wolff, Sidney C., High resolution spectroscopy with the multi-anode microchannel array detector systems, 301
Wood, Bradley C., Preamplifiers and clock drivers for the University of California at Los Angeles Reticon spectrometer, 338
Ye, B., Low noise spectrometer for the daily measurement of solar chromoshperic flux, 249
Ziebell, Manfred, Coudé auxiliary telescope (CAT): a low cost telescope at the European Southern Observatory, 243
———, European Southern Observatory (ESO) automatic prime focus camera and the general problem of remote control, 404
Zucchino, Paul, Texas Instruments' virtual phase charge-coupled device (CCD) imager operated in the frontside electron-bombarded mode, 151

SUBJECT INDEX

Aberration corrected concave holographic grating, stellar spectrograph using, 254
Analysis of synthesized dim galaxy images, 473
Application of a charge-coupled device (CCD) detector for coudé spectroscopy, 130
Applications of an infrared charge-coupled device Schottky diode array in astronomical instrumentation, 156
Array in astronomical instrumentation applications of an infrared charge-coupled device Schottky diode, 156
Array detector for far ultraviolet (FUV) astronomy, photon counting photodiode, 44
Array detector system, speckle spectroscopy: an application for the multi-anode microchannel, 311
Array detector systems, high resolution spectroscopy with the multi-anode microchannel, 301
Array performance, InSb charge-injection device, 18
Array spectrometer for 0.6–5 μm, cooled grating, 173
Array spectrometer for space applications, near-infrared linear, 177
Array, Starlab detector system: a wide field, high resolution, photon counting, 490
Array, two-dimensional infrared speckle interferometry with a 32×32 InSb charge-injection device (CID), 26
Arrays for low-background applications, integrated infrared detector, 9
Asteroids by a charge-coupled device, software simulations of the detection of rapidly moving, 104
Astrometry, methods of photoelectric, 448
Astronomical instrument control system, cost effective development of a Shuttle-based, 506
Astronomical instrumentation, applications of an infrared charge-coupled device Schottky diode array in, 156
Astronomy (IFA) charge-coupled device (CCD) system, Galileo Institute for, 96
Astronomy, optimization of charge-coupled device (CCD) imager performance for, 82
Astronomy, photon counting photodiode array detector for far ultraviolet (FUV), 44
Astronomy units and nomenclature for engineers and physicists, 516

Balloon-borne telescope and at the Multiple Mirror Telescope (MMT), use of a Fourier transform spectrometer on a, 208
Blue response of cooled silicon charge-injection devices (CIDs), fluorescent plastic coatings for improving ultraviolet and, 52
Bowen-Walraven image slicer, modified, 427

Calibration, faint object spectrograph (FOS), 268
Camera, development of a dual microchannel plate intensified charge-coupled device (CCD) speckle, 113
Camera and the general problem of remote control, European Southern Observatory (ESO) automatic prime focus, 404
Camera—a model, Space Telescope low scattered light, 395
Camera for NASA's Galileo mission to Jupiter, charge-coupled device (CCD) television, 376
Camera, new two-dimensional photon, 360
Camera, photometric properties of the Texas MkII electrographic, 453
Camera, Royal Greenwich Observatory (RGO) charge-coupled device (CCD), 87
Camera for Space Telescope, wide field and planetary, 388
Charge-coupled device (CCD) camera, Royal Greenwich Observatory (RGO), 87
Charge-coupled device (CCD) detector for coudé spectroscopy, application of a, 130
Charge-coupled device (CCD), drift scan observations with a, 146
Charge-coupled device (CCD) imager operated in the frontside electron-bombarded mode, Texas Instruments' virtual phase, 151
Charge-coupled device (CCD) imager performance for astronomy, optimization of, 82
Charge-coupled device (CCD) imagers with on-chip charge storage, differential imaging using, 76
Charge-coupled device Schottky diode array in astronomical instrumentation, applications of an infrared, 156
Charge-coupled device, software simulations of the detection of rapidly moving asteroids by a, 104
Charge-coupled device (CCD) speckle camera, development of a dual microchannel plate intensified, 113
Charge-coupled device (CCD) system, Galileo Institute for Astronomy (IFA), 96
Charge-coupled device (CCD) television camera for NASA's Galileo mission to Jupiter, 376
Charge-coupled device (CCD)/transit instrument (CTI) deep photometric and polarimetric survey—a progress report, 137
Charge-injection device array performance, InSb, 18
Charge-injection device (CID) array, two-dimensional infrared speckle interferometry with a 32×32 InSb, 26
Charge-injection devices (CIDs), fluorescent plastic coatings for improving ultraviolet and blue response of cooled silicon, 52
Charge storage, differential imaging using charge-coupled device (CCD) imagers with on-chip, 76
Chromospheric flux, low noise spectrometer for the daily measurement of solar, 249
Classifier, resolution, 465
Clock drivers for the University of California at Los Angeles Reticon spectrometer, preamplifiers and, 338
Coatings for improving ultraviolet and blue response of cooled silicon charge-injection devices (CIDs), fluorescent plastic, 52
Computer-controlled television detector system, highly versatile, 69
Concave holographic grating, stellar spectrograph using aberration corrected, 254
Control system, cost effective development of a Shuttle-based astronomical instrument, 506
Cooled grating array spectrometer for 0.6–5 μm, 173
Cooled grating Fabry-Perot spectrometer for the 10 μm region, 219
Cooled silicon charge-injection devices (CIDs), fluorescent plastic coatings for improving ultraviolet and blue response of, 52
Cosmic Background Explorer, optical design of the Diffuse Infrared Background Experiment for NASA's, 483
Cost effective development of a Shuttle-based astronomical instrument control system, 506

Coudé auxiliary telescope (CAT): a low cost telescope at the European Southern Observatory, 243
Coudé echelle spectrometer, European Southern Observatory (ESO), 232
Coudé spectroscopy, application of a charge-coupled device (CCD) detector for, 130
Counters for the infrared, single photon, 2
Counting Reticon system—description and performance, photon, 368
Cryogenic Infrared Radiance Instrument for Shuttle (CIRRIS) telescope, 225
Cryogenic testing of stepper motors, 35

Design of a four-channel simultaneous visual infrared photometer, 434
Detector arrays for low-background applications, integrated infrared, 9
Detector for coudé spectroscopy, application of a charge-coupled device (CCD), 130
Detector for far ultraviolet (FUV) astronomy, photon counting photodiode array, 44
Detector, miniature imaging photon, 365
Detector system, highly versatile computer-controlled television, 69
Detector system, speckle spectroscopy: an application for the multi-anode microchannel array, 311
Detector system: a wide field, high resolution, photon counting array, Starlab, 490
Detector systems, high resolution spectroscopy with the multi-anode microchannel array, 301
Detectors, hybrid packaging approach to improved low-noise operation of photovoltaic InSb, 29
Development of a dual microchannel plate intensified charge-coupled device (CCD), 113
Differential imaging using charge-coupled device (CCD) imagers with on-chip charge storage, 76
Diffuse Infrared Background Experiment for NASA's Cosmic Background Explorer, optical design of the, 483
Diode array in astronomical instrumentation, applications of an infrared charge-coupled device Schottky, 156
Diode laser heterodyne spectrometer for remote observations near 8 μm, tunable, 197
Drift scan observations with a charge-coupled device (CCD), 146

Earth resources techniques applied to planetary exploration, 478
Echelle spectrometer, European Southern Observatory (ESO) coudé, 232
8 μm, tunable diode laser heterodyne spectrometer for remote observations near, 197
Electrographic camera, photometric properties of the Texas MkII, 453
Electrography, microchannel intensified, 415
Electron-bombarded mode, Texas Instruments' virtual phase charge-coupled device (CCD) imager operated in the frontside, 151
Engineers and physicists, astronomy units and nomenclature for, 516
Etalons, solar corona photoelectric photometer using mica, 442
European Southern Observatory (ESO) automatic prime focus camera and the general problem of remote control, 404
European Southern Observatory, coudé auxiliary telescope (CAT): a low cost telescope at the, 243
European Southern Observatory (ESO) coudé echelle spectrometer, 232
Exploration, earth resources techniques applied to planetary, 478
Explorer, optical design of the Diffuse Infrared Background Experiment for NASA's Cosmic Background, 483
Explorer for spectral imaging, performance of the International Ultraviolet, 334

Fabry-Perot spectrometer for the 10 μm region, cooled grating, 219
Faint object spectrograph (FOS) calibration, 268
Faint object spectrograph, performance of the spectropolarimeter for the Space Telescope, 259
Far ultraviolet (FUV) astronomy, photon counting photodiode array detector for, 44
Fiber optic spectroscopy, multiple object, 279
Fiber optics spectrograph feed for the Hale telescope, multiple object, 289
Field correctors for the Starlab ultraviolet telescope, refractive, 498
Field and planetary camera for Space Telescope, wide, 388
Fluorescent plastic coatings for improving ultraviolet and blue response of cooled silicon charge-injection devices (CIDs), 52
Flux, low noise spectrometer for the daily measurement of solar chromospheric, 249
Focus camera and the general problem of remote control, European Southern Observatory, (ESO) automatic prime, 404
Four-channel simultaneous visual infrared photometer, design of a, 434
Fourier transform spectrometer on a balloon-borne telescope and at the Multiple Mirror Telescope (MMT), use of a, 208
Frontside electron-bombarded mode, Texas Instruments' virtual phase charge-coupled device (CCD) imager operated in the, 151

Galaxy images, analysis of synthesized dim, 473
Galileo Institute for Astronomy (IFA) charge-coupled device (CCD) system, 96
Galileo mission to Jupiter, charge-coupled device (CCD) television camera for NASA's, 376
Grating array spectrometer for 0.6–5 μm, cooled, 173
Grating Fabry-Perot spectrometer for the 10 μm region, cooled, 219
Grating, stellar spectrograph using aberration corrected concave holographic, 254
Grazing incidence optics: new techniques for high sensitivity spectroscopy in the space ultraviolet, 321
Grens for a Ritchey-Chrétien (R-C) telescope, 252

Hale telescope, multiple object fiber optics spectrograph feed for the, 289
Heterodyne spectrometer for remote observations near 8 μm, tunable diode laser, 197
High precision radial velocity spectrometer, ultra-, 315
High resolution, photon counting array, Starlab detector system: a wide field, 490
High resolution spectroscopy with the multi-anode microchannel array detector systems, 301
High sensitivity spectroscopy in the space ultraviolet, grazing incidence optics: new techniques for, 321
Highly versatile computer-controlled television detector system, 69
Holographic grating, stellar spectrograph using aberration corrected concave, 254
Hybrid packaging approach to improved low-noise operation of photovoltaic InSb detectors, 29
Image slicer, modified Bowen-Walraven, 427
Imager operated in the frontside electron-bombarded mode, Texas Instruments' virtual phase charge-coupled device (CCD), 151
Imager performance for astronomy, optimization of charge-coupled device (CCD), 82
Imagers with on-chip charge storage, differential imaging using charge-coupled device (CCD), 76
Images, analysis of synthesized dim galaxy, 473
Imaging using charge-coupled device (CCD) imagers with on-chip charge storage, differential, 76
Imaging, performance of the International Ultraviolet Explorer for spectral, 334
Imaging photon detector, miniature, 365
Infrared Background Experiment for NASA's Cosmic Background Explorer, optical design of the Diffuse, 483
Infrared charge-coupled device Schottky diode array in astronomical instrumentation, applications of an, 156
Infrared detector arrays for low-background applications, integrated, 9
Infrared linear array spectrometer for space applications, near-, 177
Infrared mapping spectrometer for investigation of Jupiter and its satellites, near-, 182
Infrared photometer, design of a four-channel simultaneous visual, 434
Infrared Radiance Instrument for Shuttle (CIRRIS) telescope, cryogenic, 225

Infrared, single photon counters for the, 2
Infrared speckle interferometry with a 32 × 32 InSb charge-injection device (CID) array, two-dimensional, 26
Infrared spectrophotometers, proposal for advanced, 166
Injection device array performance, InSb charge-, 18
Injection device (CID) array, two-dimensional infrared speckle interferometry with a 32 × 32 InSb charge-, 26
Injection devices (CIDs), fluorescent plastic coatings for improving ultraviolet and blue response of cooled silicon charge-, 52
InSb charge-injection device array performance, 18
InSb charge-injection device (CID) array, two-dimensional infrared speckle interferometry with a 32 × 32, 26
InSb detectors, hybrid packaging approach to improved low-noise operation of photovoltaic, 29
Institute for Astronomy (IFA) charge-coupled device (CCD) system, Galileo, 96
Instrument control system, cost effective development of a Shuttle-based astronomical, 506
Instrument (CTI) deep photometric and polarimetric survey—a progress report charge-coupled device (CCD)/transit, 137
Integrated infrared detector arrays for low-background applications, 9
Interferometry with a 32 × 32 InSb charge-injection device (CID) array, two-dimensional infrared speckle, 26
International Ultraviolet Explorer for spectral imaging, performance of the, 334

Jupiter, charge-coupled device (CCD) television camera for NASA's Galileo mission to, 376
Jupiter and its satellites, near-infrared mapping spectrometer for investigation of, 182

Kitt Peak, multi-aperture spectroscopy at, 296

Laser heterodyne spectrometer for remote observations near 8 μm, tunable diode, 197
Light camera—a model, Space Telescope low scattered, 395
Linear array spectrometer for space applications, near-infrared, 177
Low-background applications, integrated infrared detector arrays for, 9
Low-noise operation of photovoltaic InSb detectors, hybrid packaging approach to improved, 29
Low noise spectrometer for the daily measurement of solar chromospheric flux, 249
Low scattered light camera—a model, Space Telescope, 395

Mapping spectrometer for investigation of Jupiter and its satellites, near-infrared, 182
Methods of photoelectric astrometry, 448
Mica etalons, solar corona photoelectric photometer using, 442
Microchannel array detector system, speckle spectroscopy: an application for the multi-anode, 311
Microchannel array detector systems, high resolution spectroscopy with the multi-anode, 301
Microchannel intensified electrography, 415
Microchannel plate intensified charge-coupled device (CCD) speckle camera, development of a dual, 113
Miniature imaging photon detector, 365
Modified Bowen-Walraven image slicer, 427
Motors, cryogenic testing of stepper, 35
Multi-anode microchannel array detector system, speckle spectroscopy: an application for the, 311
Multi-anode microchannel array detector systems, high resolution spectroscopy with the, 301
Multi-aperture spectroscopy at Kitt Peak, 296
Multiple Mirror Telescope (MMT), use of a Fourier transform spectrometer on a balloon-borne telescope and at the, 208
Multiple object fiber optic spectroscopy, 279
Multiple object fiber optics spectrograph feed for the Hale telescope, 289

NASA's Cosmic Background Explorer, optical design of the Diffuse Infrared Background Experiment for, 483
NASA's Galileo mission to Jupiter, charge-coupled device (CCD) television camera for, 376
Near-infrared linear array spectrometer for space applications, 177
Near-infrared mapping spectrometer for investigation of Jupiter and its satellites, 182
New two-dimensional photon camera, 360
Noise spectrometer for the daily measurement of solar chromospheric flux, low, 249
Nomenclature for engineers and physicists, astronomy units and, 516

Object fiber optic spectroscopy, multiple, 279
Object fiber optics spectrograph feed for the Hale telescope, multiple, 289
Observations near 8 μm, tunable diode laser heterodyne spectrometer for remote, 197
Observatory (ESO) automatic prime focus camera and the general problem of remote control, European Southern, 404
Observatory (RGO) charge-coupled device (CCD) camera, Royal Greenwich, 87
Observatory, coudé auxiliary telescope (CAT): a low cost telescope at the European Southern, 243
Observatory (ESO) coudé echelle spectrometer, European Southern, 232
Optic spectroscopy, multiple object fiber, 279
Optical design of the Diffuse Infrared Background Experiment for NASA's Cosmic Background Explorer, 483
Optics: new techniques for high sensitivity spectroscopy in the space ultraviolet, grazing incidence, 321
Optics spectrograph feed for the Hale telescope, multiple object fiber, 289
Optimization of charge-coupled device (CCD) imager performance for astronomy, 82

Packaging approach to improved low-noise operation of photovoltaic InSb detectors, hybrid, 29
Performance of the International Ultraviolet Explorer for spectral imaging, 334
Performance of the spectropolarimeter for the Space Telescope faint object spectrograph, 259
Photodiode array detector for far ultraviolet (FUV) astronomy, photon counting, 44
Photoelectric astrometry, methods of, 448
Photoelectric photometer using mica etalons, solar corona photoelectric, 442
Photometer, design of a four-channel simultaneous visual infrared, 434
Photometer using mica etalons, solar corona photoelectric, 442
Photometric and polarimetric survey—a progress report, charge-coupled device (CCD)/transit instrument (CTI) deep, 137
Photometric properties of the Texas MkII electrographic camera, 453
Photon camera, new two-dimensional, 360
Photon counters for the infrared, single, 2
Photon counting array, Starlab detector system: a wide field, high resolution, 490
Photon counting photodiode array detector for far ultraviolet (FUV) astronomy, 44
Photon counting Reticon system—description and performance, 368
Photon detector, miniature imaging, 365
Photovoltaic InSb detectors, hybrid packaging approach to improved low-noise operation of, 29
Physicists, astronomy units and nomenclature for engineers and, 516
Planetary camera for Space Telescope, wide field and, 388
Planetary exploration, earth resources techniques applied to, 478
Plastic coatings for improving ultraviolet and blue response of cooled silicon charge-injection devices (CIDs), fluorescent, 52
Plate intensified charge-coupled device (CCD) speckle camera, development of a dual microchannel, 113
Polarimetric survey—a progress report, charge-coupled device (CCD)/transit instrument (CTI) deep photometric and, 137

Preamplifiers and clock drivers for the University of California at Los Angeles Reticon spectrometer, 338
Precision radial velocity spectrometer, ultra-high, 315
Proposal for advanced infrared spectrophotometers, 166

Radial velocity spectrometer, ultra-high precision, 315
Radiance Instrument for Shuttle (CIRRIS) telescope, cryogenic Infrared, 225
Refractive field correctors for the Starlab ultraviolet telescope, 498
Remote control, European Southern Observatory (ESO) automatic prime focus camera and the general problem of, 404
Remote observations near 8 μm, tunable diode laser heterodyne spectrometer for, 197
Resolution classifier, 465
Resolution spectroscopy with the multi-anode microchannel array detector systems, high, 301
Resources techniques applied to planetary exploration, earth, 478
Reticon spectrometer, preamplifiers and clock drivers for the University of California at Los Angeles, 338
Reticon system—description and performance, photon counting, 368
Ritchey-Chrétien (R-C) telescope, grens for a, 252
Royal Greenwich Observatory (RGO) charge-coupled device (CCD) camera, 87

Satellites, near-infrared mapping spectrometer for investigation of Jupiter and its, 182
Scan observations with a charge-coupled device (CCD), drift, 146
Scattered light camera—a model, Space Telescope low, 395
Schottky diode array in astronomical instrumentation, applications of an infrared charge-coupled device, 156
Sensitivity spectroscopy in the space ultraviolet, grazing incidence optics: new techniques for high, 321
Shuttle-based astronomical instrument control system, cost effective development of a, 506
Shuttle (CIRRIS) telescope, cryogenic Infrared Radiance Instrument for, 225
Silicon charge-injection devices (CIDs), fluorescent plastic coatings for improving ultraviolet and blue response of cooled, 52
Simulations of the detection of rapidly moving asteroids by a charge-coupled device, software, 104
Simultaneous visual infrared photometer, design of a four-channel, 434
Single photon counters for the infrared, 2
Slicer, modified Bowen-Walraven imager, 427
Software simulations of the detection of rapidly moving asteroids by a charge-coupled device, 104
Solar chromospheric flux, low noise spectrometer for the daily measurement of, 249
Solar corona photoelectric photometer using mica etalons, 442
Space applications, near-infrared linear array spectrometer for, 177
Space Telescope faint object spectrograph, performance of the spectropolarimeter for the, 259
Space Telescope low scattered light camera—a model, 395
Space Telescope, wide field and planetary camera for, 388
Space ultraviolet, grazing incidence optics: new techniques for high sensitivity spectroscopy in the, 321
Speckle camera, development of a dual microchannel plate intensified charge-coupled device (CCD), 113
Speckle interferometry with a 32 × 32 InSb charge-injection device (CID) array, two-dimensional infrared, 26
Speckle spectroscopy: an application for the multi-anode microchannel array detector system, 311
Spectral imaging, performance of the International Ultraviolet Explorer for, 334
Spectrograph using aberration corrected concave holographic grating, stellar, 254
Spectrograph (FOS) calibration, faint object, 268
Spectrograph feed for the Hale telescope, multiple object fiber optics, 289
Spectrograph, performance of the spectropolarimeter for the Space Telescope faint object, 259
Spectrometer on a balloon-borne telescope and at the Multiple Mirror Telescope (MMT), use of a Fourier transform, 208
Spectrometer for the daily measurement of solar chromospheric flux, low noise, 249
Spectrometer, European Southern Observatory (ESO) coudé echelle, 232
Spectrometer for investigation of Jupiter and its satellites, near-infrared mapping, 182
Spectrometer, preamplifiers and clock drivers for the University of California at Los Angeles Reticon, 338
Spectrometer for remote observations near 8 μm, tunable diode laser heterodyne, 197
Spectrometer for space applications, near-infrared linear array, 177
Spectrometer for the 10 μm region, cooled grating Fabry-Perot, 219
Spectrometer, ultra-high precision radial velocity, 315
Spectrometer for 0.6–5 μm, cooled grating array, 173
Spectrophotometers, proposal for advanced infrared, 166
Spectropolarimeter for the Space Telescope faint object spectrograph, performance of the, 259
Spectroscopy, application of a charge-coupled device (CCD) detector for coudé, 130
Spectroscopy: an application for the multi-anode microchannel array detector system, speckle, 311
Spectroscopy at Kitt Peak, multi-aperture, 296
Spectroscopy with the multi-anode microchannel array detector systems, high resolution, 301
Spectroscopy, multiple object fiber optic, 279
Spectroscopy in the space ultraviolet, grazing incidence optics: new techniques for high sensitivity, 321
Starlab detector system: a wide field, high resolution, photon counting array, 490
Starlab ultraviolet telescope, refractive field correctors for the, 498
Stellar spectrograph using aberration corrected concave holographic grating, 254
Stepper motors, cryogenic testing of, 35
Synthesized dim galaxy images, analysis of, 473

Telescope, cryogenic Infrared Radiance Instrument for Shuttle (CIRRIS), 225
Telescope at the European Southern Observatory, coudé auxiliary telescope (CAT): a low cost, 243
Telescope faint object spectrograph, performance of the spectropolarimeter for the Space, 259
Telescope (MMT), use of a Fourier transform spectrometer on a balloon-borne telescope and at the Multiple Mirror, 208
Telescope, grens for a Ritchey-Chrétien (R-C), 252
Telescope (CAT): a low cost telescope at the European Southern Observatory, coudé auxiliary, 243
Telescope low scattered light camera—a model, Space, 395
Telescope and at the Multiple Mirror Telescope (MMT), use of a Fourier transform spectrometer on a balloon-borne, 208
Telescope, multiple object fiber optics spectrograph feed for the Hale, 289
Telescope, refractive field correctors for the Starlab ultraviolet, 498
Telescope, wide field and planetary camera for Space, 388
Television camera for NASA's Galileo mission to Jupiter, charge-coupled device (CCD), 376
Television detector system, highly versatile computer-controlled, 69
10 μm region, cooled grating Fabry-Perot spectrometer for the, 219
Texas Instruments' virtual phase charge-coupled device (CCD) imager operated in the frontside electron-bombarded mode, 151
Texas MkII electrographic camera, photometric properties of the, 453
Transform spectrometer on a balloon-borne telescope and at the Multiple Mirror Telescope (MMT), use of a Fourier, 208
Transit instrument (CTI) deep photometric and polarimetric survey—a progress report, charge-coupled device (CCD)/, 137
Tunable diode laser heterodyne spectrometer for remote observations near 8 μm, 197
Two-dimensional infrared speckle interferometry with a 32 × 32 InSb charge-injection device (CID) array, 26
Two-dimensional photon camera, new, 360

Ultra-high precision radial velocity spectrometer, 315
Ultraviolet (FUV) astronomy, photon counting photodiode array detector for far, 44
Ultraviolet and blue response of cooled silicon charge-injection devices (CIDs), fluorescent plastic coatings for improving, 52
Ultraviolet Explorer for spectral imaging, performance of the International, 334
Ultraviolet, grazing incidence optics: new techniques for high sensitivity spectroscopy in the space, 321
Ultraviolet telescope, refractive field correctors for the Starlab, 498
Units and nomenclature for engineers and physicists, astronomy, 516

University of California at Los Angeles Reticon spectrometer, preamplifiers and clock drivers for the, 338
Use of Fourier transform spectrometer on a balloon-borne telescope and at the Multiple Mirror Telescope (MMT), 208

Velocity spectrometer, ultra-high precision radial, 315
Virtual phase charge-coupled device (CCD) imager operated in the frontside electron-bombarded mode, Texas Instruments', 151
Visual infrared photometer, design of a four-channel simultaneous, 434

Wide field, high resolution, photon counting array, Starlab detector system: a, 490
Wide field and planetary camera for Space Telescope, 388